

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 (canceled)

1 Claim 11 (currently amended): Sensor for transmission
2 measurement in a washing machine or dishwasher, the
3 sensor comprising:
4 - a carrier to which a transmitter is attached for
5 emitting a transmitter beam, and to which a receiver is
6 attached to receive radiation from the transmitter;
7 wherein the carrier comprises a first leg to which the
8 transmitter is attached and a second leg to which the
9 receiver is attached opposite the transmitter, and
10 - a diaphragm system arranged separate from the
11 carrier and spaced from the transmitter, the diaphragm
12 system including ~~[[comprising]]~~ a first diaphragm opening
13 and a second diaphragm opening, both the first diaphragm
14 opening and the second diaphragm opening being arranged
15 in a path of the transmitter beam in order to induce
16 [[generate]] a measurement beam generated by the
17 transmitter to be directed to the receiver, wherein the
18 first diaphragm opening is arranged adjacent to, but
19 spaced from, the transmitter and the second diaphragm
20 opening is arranged adjacent to, but spaced from, the
21 receiver in the beam path of the transmitter beam such
22 that the first and second diaphragms define a fluid
23 spacing for the measurement beam passing therethrough for
24 measuring the transmission properties of the fluid
25 therebetween.

1 Claim 12 (currently amended): Sensor for transmission
2 measurement in a washing machine or dishwasher, the
3 sensor comprising:

4 - a carrier to which a transmitter is attached for
5 emitting a transmitter beam, and to which a receiver is
6 attached to receive radiation from the transmitter,
7 wherein the carrier comprises a first leg to which the
8 transmitter is attached and a second leg to which the
9 receiver is attached opposite the transmitter, and
10 - a diaphragm system arranged separate from the
11 carrier and spaced from the receiver, wherein the
12 diaphragm system includes ~~[[comprises]]~~ a first diaphragm
13 opening and a second diaphragm opening, both the first
14 diaphragm opening and the second diaphragm opening being
15 arranged in a path of the transmitter beam to induce the
16 alignment of ~~[[generate]]~~ a reception beam ~~[[aligned]]~~ to
17 the receiver, wherein the first diaphragm opening is
18 arranged adjacent to, but spaced from, the transmitter
19 and the second diaphragm opening is arranged adjacent to,
20 but spaced from, the receiver in the beam path of the
21 transmitter beam such that the first and second
22 diaphragms define a fluid spacing for the measurement
23 beam passing therethrough for measuring the transmission
24 properties of the fluid therebetween.

1 Claim 13 (currently amended): Sensor for transmission
2 measurement in a washing machine or dishwasher, the
3 sensor comprising:

4 - a carrier to which a transmitter is attached
5 for emitting a transmitter beam, and to which a receiver
6 is attached to receive radiation from the transmitter,
7 wherein the carrier comprises a first leg to which the

8 transmitter is attached and a second leg to which the
9 receiver is attached opposite the transmitter, and
10 - a diaphragm system arranged separate from the
11 carrier and spaced from the transmitter and the receiver,
12 the diaphragm system including ~~[[comprising]]~~ a first
13 diaphragm opening in the beam path of the transmitter
14 beam to define ~~[[generate]]~~ a measurement beam aligned to
15 the receiver, and including ~~[[comprising]]~~ a second
16 diaphragm opening in a path of the transmitter beam to
17 induce the alignment of ~~[[generate]]~~ a reception beam
18 ~~[[aligned]]~~ to the receiver, wherein the first diaphragm
19 opening is arranged adjacent to, but spaced from, the
20 transmitter and the second diaphragm opening is arranged
21 adjacent to, but spaced from, the receiver in the beam
22 path of the transmitter beam such that the first and
23 second diaphragms define a fluid spacing for the
24 measurement beam passing therethrough for measuring the
25 transmission properties of the fluid therebetween.

Claim 14 (canceled)

1 Claim 15 (previously presented): Sensor according to
2 claim 11, wherein the first and second legs are of
3 different lengths, the sensor further comprising a
4 temperature sensor arranged on a free end of the longer
5 leg of the carrier.

Claims 16 and 17 (canceled)

1 Claim 18 (previously presented): Sensor according to
2 claim 12, wherein the first and second legs are of
3 different lengths, the sensor further comprising a

4 temperature sensor arranged on a free end of the longer
5 leg of the carrier.

Claims 19 and 20 (canceled)

1 Claim 21 (previously presented): Sensor according to
2 claim 13, wherein the first and second legs are of
3 different lengths, the sensor further comprising a
4 temperature sensor arranged on a free end of the longer
5 leg of the carrier.

Claims 22-26 (canceled)

1 Claim 27 (previously presented): The sensor of claim 13
2 wherein a spacing between the first diaphragm opening and
3 second diaphragm opening of the diaphragm system is
4 greater than the space between the diaphragm system and
5 the transmitter.

1 Claim 28 (previously presented): The sensor of claim 13
2 wherein a spacing between the first diaphragm opening and
3 second diaphragm opening of the diaphragm system is
4 greater than the space between the diaphragm system and
5 the receiver.

1 Claim 29 (previously presented): The sensor of claim 11
2 wherein the transmitter has a main lobe and wherein the
3 diaphragm system screens at least some areas of the main
4 lobe.

1 Claim 30 (currently amended): The sensor of claim 12
2 wherein the receiver has a main lobe and wherein the

3 diaphragm system screens at least some areas of the main
4 lobe. [[-]]

1 Claim 31 (previously presented): The sensor of claim 13
2 wherein the transmitter has a first main lobe, receiver
3 has a second main lobe, and the diaphragm system screens
4 at least some areas of both the first main lobe of the
5 transmitter and the second main lobe of the receiver.

1 Claim 32 (new): The sensor of claim 11, wherein the
2 first diaphragm opening is arranged closer to the
3 transmitter than to the receiver and the second diaphragm
4 opening is arranged closer to the receiver than to the
5 transmitter.

1 Claim 33 (new): The sensor of claim 11, wherein a
2 distance between the first and second diaphragm opening
3 is greater than either (A) a distance between the first
4 diaphragm opening and the transmitter and (B) a distance
5 between a second diaphragm opening and the receiver.

1 Claim 34 (new): The sensor of claim 11, wherein the
2 diameter of the second diaphragm opening is smaller than
3 the diameter of the first diaphragm opening.

1 Claim 35 (new): The sensor of claim 11, wherein the
2 diameter of the second diaphragm opening is larger than
3 the diameter of the first diaphragm opening.

1 Claim 36 (new): The sensor of claim 11, the sensor
2 further comprising:

3 a housing configured to accommodate the
4 transmitter, the receiver and the diaphragm system.